

RESPONSE TO OEPA COMMENTS ON THE DOE RESPONSES TO THE
ORIGINAL OEPA COMMENTS ON THE OPERABLE UNIT 4 - SILO
SUPERSTRUCTURE FOR THE FRVP PRELIMINARY AND PRE-FINAL DESIGN

09/13/96

DOE-1337-96

DOE-FN

EPAS

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RESPONSES

- 1

Response: Design of the New Radon Treatment System (NRTS) and subsequent development of Standard Operating Procedures (SOPs) will establish filter changeout requirements. Typically at the FEMP, the requirement for changeout of HEPA filter elements is when the differential pressure reaches 4 inches of water. Being an in-line spare, the time for activation of the spare filter will be the time it takes for opening/closing the appropriate valves.

Action: No action at this time.

- 4) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: RtC Pg #: 8 Line #: n/a Code: C
 Original Comment #: 22

Comment: Although the table and the referenced text inherently infers direct exposure, in order to be technically correct the term "direct exposure" should be added to this table. Clarification of this table is important in that tables are more likely to be used as a quick reference, and this table may misdirect the reader thinking that the table references (sic) total exposure.

Response: Table C-1 will be revised to clarify direct exposure

Action: The document will be revised via the attached change-page.

- 5) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: RtC Pg #: 8 Line #: n/a Code: C
 Original Comment #: 23

Comment: 10 CFR 835 was referenced for personnel radon monitoring. Will individual workers be provided radon dosimetry, in addition to ambient air monitoring? Will ambient air monitoring include radon daughter measurements?

Response: Yes, workers will be provided with radon dosimetry per 10 CFR 835, in addition to conducting ambient air monitoring. Ambient air monitoring will measure radiation resulting from radon daughters.

Action: No action at this time.

Calculation 4161-56-02

Table C-1 - Direct Exposure Dose Rate Estimates for workers in ER
(Centerline Above Silo Dome)

Waste Height (ft)	Headspace Height (ft)	Steel Shield Thickness (in)	Dose Rate from Waste (mrem/hr)	Dose Rate from Radon (mrem/hr)	Total Dose Rate (mrem/hr)
23	8.1	2	8.9	1.0	9.9
		1	18.2	2.9	21.1
18	13.1	2	8.6	1.7	10.3
		1	17.4	4.6	22.0
13	18.1	2	8.2	2.3	10.5
		1	16.2	6.2	22.4
8	23.1	2	7.7	2.8	10.5
		1	14.9	7.5	22.4
3	28.1	2	7.2	3.3	10.5
		1	13.6	8.8	22.4
Other direct exposure dose rate estimates					
Description			Shielding Material	Thickness (in)	Dose Rate (mrem/hr)
Top dose @ 4 ft beyond silo side along manway			steel	0.25	14.4
Side contact dose from existing residue			soil	68	7.20E-06
Side contact dose with + 20 ft headspace			soil	68	6.32E-06
10 meter side dose from headspace with no soil			n/a	n/a	2.8
Notes:					
1. These values are based on Silo 1 residue concentrations from the RI/FS.					

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Rev. No.: 1

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